

NASA Aviation Safety Reporting System (ASRS)

RRP Safety Summit
August 12, 2008

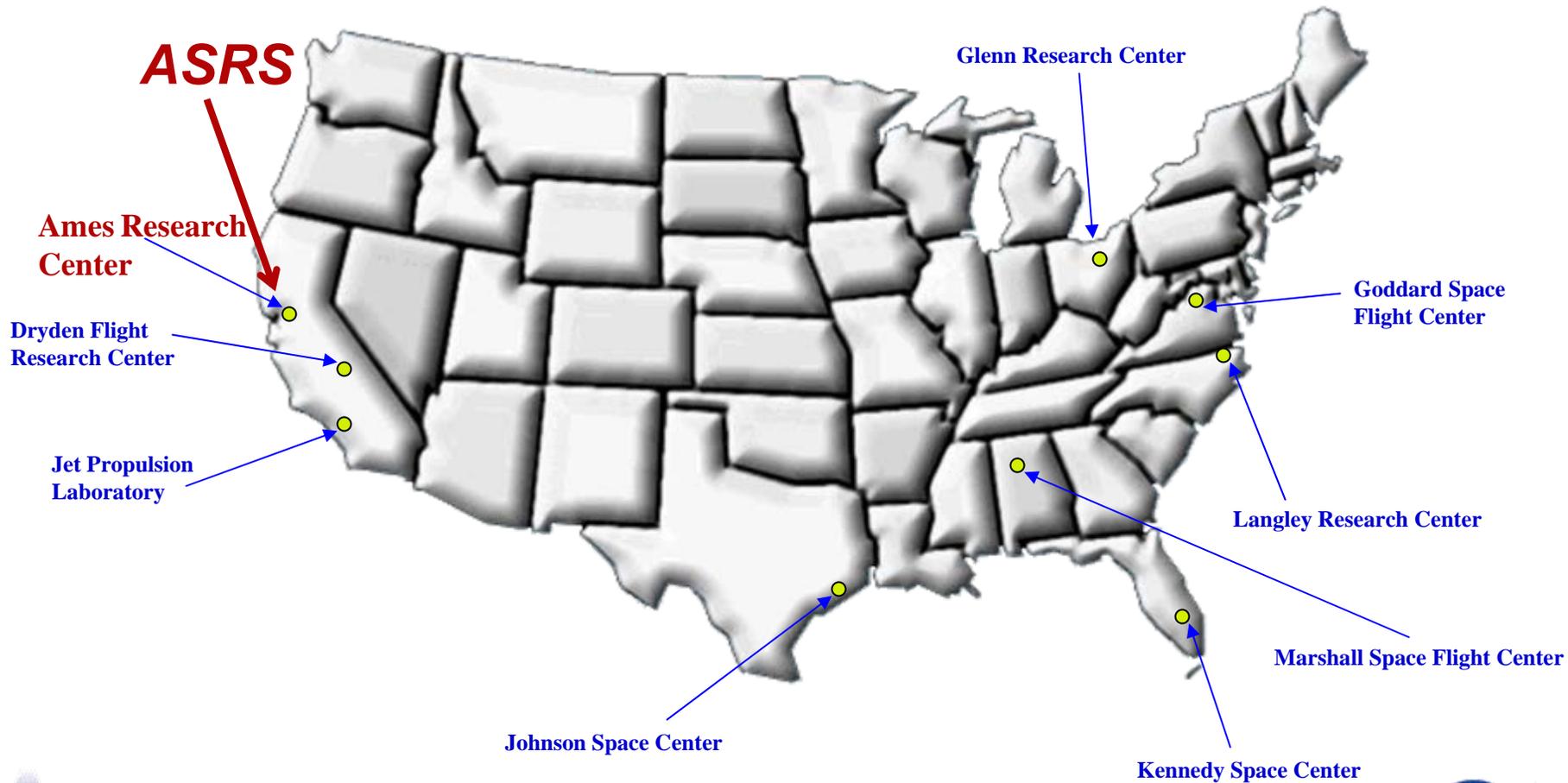
The Keck Center of the National Academies



Aviation Safety Reporting System



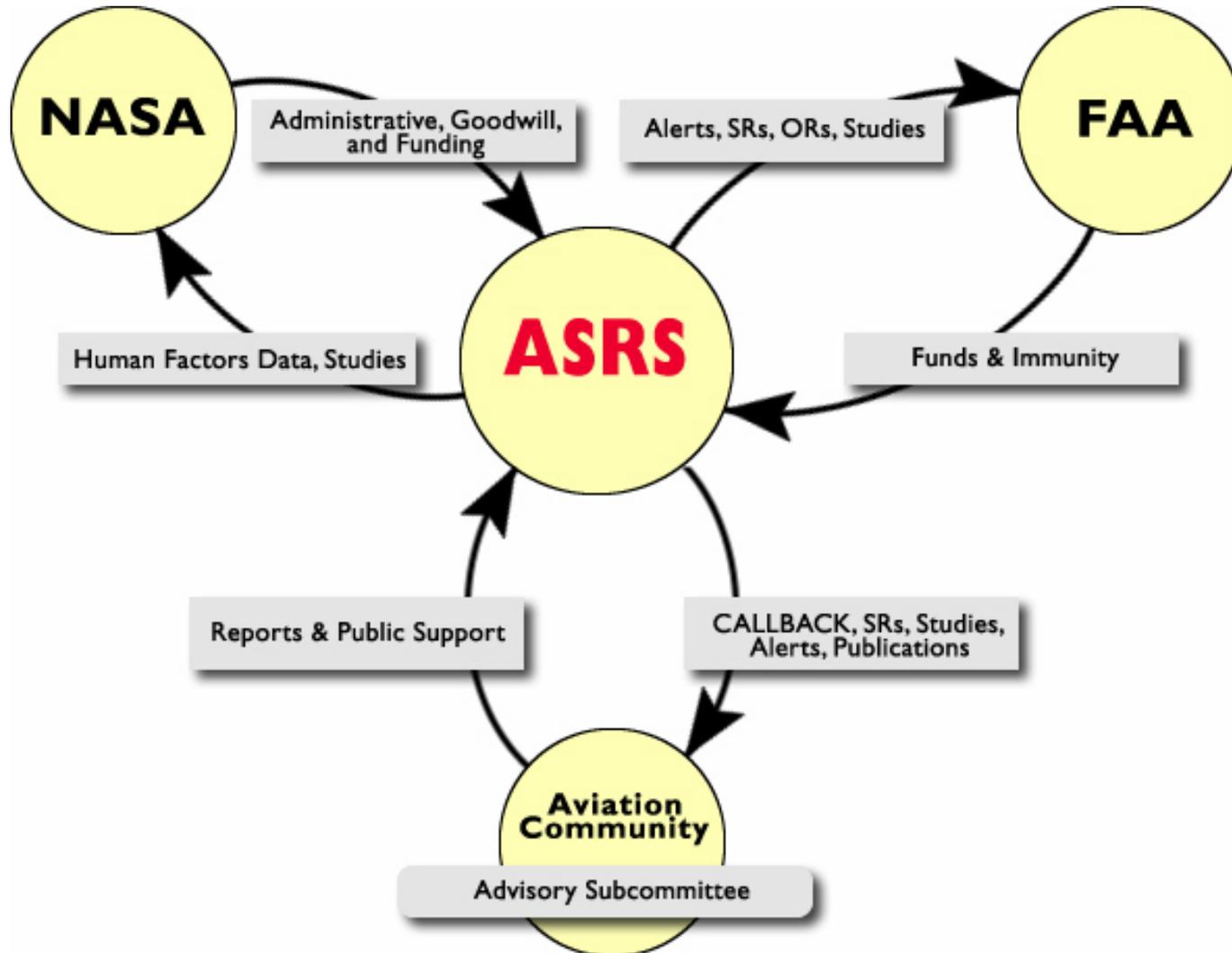
NASA Centers



August 2008



Stakeholders



Governing Documents

- ▶ **Federal Register Notices 1975 & 1976**
- ▶ **Federal Aviation Regulation - 14 CFR 91.25**
- ▶ **FAA Advisory Circular (00-46A, B, C, & D)**
 - Defines immunity provisions for pilots and others
- ▶ **FAA Facility Operation and Administration Handbook, 7210.3 (Air Traffic Controllers)**
 - Formerly defined immunity provision for Air Traffic Controllers
- ▶ **FAA Order 8020.10: Aviation Safety Reporting Program**
 - Establishes program responsibilities & ASRP Study Group
- ▶ **Interagency Agreement (signed in 1999 and renewed in 2004 for an additional 5 years)**
 - IA details such factors as duration, products, expected funding level, termination clause, points of contact, etc.



FAA Advisory Circular AC 00-46D

The filing of a report with NASA concerning an incident or occurrence involving a violation of 49 U.S.C. Subtitle IV, or the FAR, is considered by FAA to be indicative of a constructive attitude. Such an attitude will tend to prevent future violations. Accordingly, although a finding of a violation may be made, neither a civil penalty nor certificate suspension will be imposed if:

- (1) The violation was inadvertent and not deliberate;
- (2) The violation did not involve a criminal offense, or accident, or action under 49U.S.C. Section 44709 which discloses a lack of qualification or competency, which are wholly excluded from this policy;
- (3) The person has not been found in any prior FAA enforcement action to have committed a violation of 49 U.S. C. Subtitle VIII, or any regulation promulgated there for a period of 5 years prior to the date of the occurrence; and
- (4) The person proves that, within 10 days after the violation, he or she completed and delivered or mailed a written report of the incident or occurrence to NASA under ASRS. See paragraphs 5c and 7b.

NOTE: Paragraph 9 does not apply to air traffic controllers. Provisions concerning air traffic controllers involved in incidents reported under ASRS are addressed in Order 7210.3.



Predominant Statements Contained in the Governing Documents

- ▶ ASRS is voluntary, confidential, and non-punitive safety reporting system with NASA as honest broker; funded by FAA
- ▶ Reports will not be used by or made available to the FAA for disciplinary or enforcement purposes
- ▶ Limited immunity provisions present from first release of the Advisory Circular AC 00-46A
- ▶ Accidents by NTSB criteria and DOJ criminal offenses wholly excluded
- ▶ Time-critical information alerted to FAA and others
- ▶ Advisory Committee appointed from all elements involved in the operational aspects of the National Aviation System
- ▶ Reporting of findings to the public, aviation community, and the FAA



Reporting to ASRS



Aviation Safety Reporting System



Reporters to ASRS

Aviation safety reports from:

- ▶ Pilots
 - Airline
 - General Aviation
 - Corporate
 - Government
 - Military
- ▶ ATC Controllers
- ▶ Mechanics
- ▶ Flight Attendants
- ▶ Airline Dispatchers
- ▶ Ground Crew
- ▶ Others...



Filling Out the ASRS Form

Identification Strip

A

General Information
(Accession Number Added)

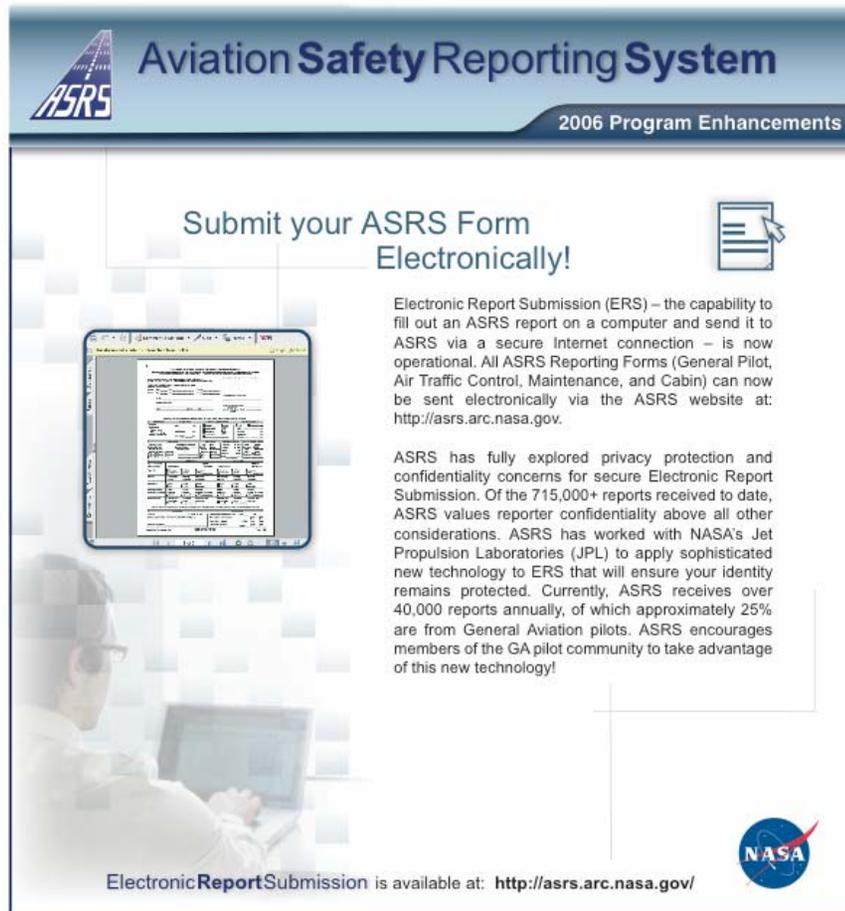
B

Event Narrative

C

Patient Safety Reporting System (PSRS) Report Form		
<p>IDENTIFICATION STRIP: Please fill in all blanks. This section will be returned to you. NO RECORD WILL BE KEPT OF YOUR IDENTITY. (SPACE BELOW RESERVED FOR PSRS REPORT RECEIPT STAMP)</p>		
<p>TELEPHONE NUMBERS where we may reach you for further details of this occurrence:</p>		
<p>HOME Area _____ No. _____ Hours _____</p>		
<p>WORK Area _____ No. _____ Hours _____</p>		
<p>ADDRESS to which you want your confirmation of report receipt mailed:</p>		<p>PLEASE SUPPLY A BRIEF DESCRIPTION OF THE EVENT OR SITUATION YOU ARE REPORTING.</p>
<p>NAME _____</p>		_____
<p>ADDRESS / PO BOX _____</p>		_____
<p>CITY _____ STATE _____ ZIP _____</p>		<p>DATE OF OCCURRENCE _____</p> <p>LOCAL TIME (24 hr. clock) _____</p>
<p>ALL IDENTITIES AND OTHER UNIQUELY IDENTIFYING INFORMATION CONTAINED IN THIS REPORT WILL BE REMOVED TO ASSURE COMPLETE REPORTER ANONYMITY. YOUR NAME IS IMPORTANT SO YOUR ID STRIP CAN BE RETURNED TO YOU. THE INFORMATION SUBMITTED ON THIS FORM IS CONFIDENTIAL AND PROTECTED UNDER THE PROVISIONS OF 38 USC 5755, DEPARTMENT OF VETERANS AFFAIRS.</p>		
<p>PLEASE FILL IN SPACES AND CHECK BOXES BELOW THAT APPLY TO THIS EVENT OR SITUATION YOU ARE REPORTING.</p>		
REPORTER INFORMATION AND EVENT BACKGROUND		
<p>What is your current VA position?</p> <p><input type="checkbox"/> Physician (Specialty) _____</p> <p><input type="checkbox"/> Physician's Assistant</p> <p><input type="checkbox"/> Nurse Practitioner</p> <p><input type="checkbox"/> Nurse Anesthetist</p> <p><input type="checkbox"/> Registered Nurse</p> <p><input type="checkbox"/> Licensed Practical / Vocational Nurse</p> <p><input type="checkbox"/> Nursing Assistant</p> <p><input type="checkbox"/> Pharmacist</p> <p><input type="checkbox"/> Medical Technologist</p> <p><input type="checkbox"/> Lab Technician / Assistant</p> <p><input type="checkbox"/> Rehabilitation Therapist</p> <p><input type="checkbox"/> Respiratory Therapist</p> <p><input type="checkbox"/> Environmental / Engineering Services</p> <p><input type="checkbox"/> Other _____</p>	<p>How many years of health care experience do you have? _____</p> <p>How many years have you worked at the VA? _____</p> <p>How many years have you worked in your current position? _____</p>	<p>Where did the event occur?</p> <p><input type="checkbox"/> Inpatient</p> <p><input type="checkbox"/> Outpatient Clinic</p> <p><input type="checkbox"/> CBQC</p> <p>What shift were you working when the incident occurred?</p> <p>_____ A.M. / P.M. to _____ A.M. / P.M.</p> <p>Was this your regular shift? _____</p>
EVENT LOCATION	ENVIRONMENTAL FACTORS	OTHER FACTORS
<p>Where did the event occur? (check all that apply)</p> <p><input type="checkbox"/> Patient Room</p> <p><input type="checkbox"/> Operating Room</p> <p><input type="checkbox"/> Recovery Room</p> <p><input type="checkbox"/> ICU / CCU / TCU</p> <p><input type="checkbox"/> Nurses Station</p> <p><input type="checkbox"/> Emergency Department</p> <p><input type="checkbox"/> Pharmacy</p> <p><input type="checkbox"/> Radiology</p> <p><input type="checkbox"/> Laboratory</p> <p><input type="checkbox"/> Rehabilitation Areas</p> <p><input type="checkbox"/> Behavioral / Mental Health</p> <p><input type="checkbox"/> Hallway or other Common Area</p> <p><input type="checkbox"/> Long-Term Care / Nursing Home</p> <p><input type="checkbox"/> Patient's Home</p> <p><input type="checkbox"/> Other _____</p>	<p>Environmental factors that contributed to the event (check all that apply):</p> <p><input type="checkbox"/> Lighting</p> <p><input type="checkbox"/> Noise Level</p> <p><input type="checkbox"/> Temperature</p> <p><input type="checkbox"/> Work Space Configuration</p> <p><input type="checkbox"/> Other: _____</p>	<p>Were any of the following a factor in the event? (check all that apply)</p> <p><input type="checkbox"/> Medical Device</p> <p><input type="checkbox"/> Medications</p> <p><input type="checkbox"/> Procedures</p> <p><input type="checkbox"/> Transport</p> <p><input type="checkbox"/> Patient Record Documentation</p> <p><input type="checkbox"/> Imaging and X-rays</p> <p><input type="checkbox"/> Laboratory and Diagnostics</p> <p><input type="checkbox"/> Equipment</p> <p><input type="checkbox"/> Home Care</p> <p><input type="checkbox"/> Other: _____</p>
EVENT DESCRIPTION		
<p>Keeping in mind the topics shown below, discuss those which you feel are relevant and anything else you feel is important. Include what you believe really CAUSED the problem, and what can be done to PREVENT a recurrence, or CORRECT the situation. (Continue on the other side and use additional paper, if needed)</p>		
<p>CHAIN OF EVENTS</p> <ul style="list-style-type: none"> How the problem arose How it was discovered 	<ul style="list-style-type: none"> Contributing factors Corrective actions 	<p>HUMAN PERFORMANCE FACTORS</p> <ul style="list-style-type: none"> Perceptions, judgments, decisions Factors affecting the quality of human performance Actions or inactions
<p>PSRS - HSA Form PS, March 2002 Continued other side... # PS (0301-02)</p>		

Electronic Report Submission (ERS)



The screenshot shows the ASRS website header with the logo and the text "Aviation Safety Reporting System" and "2006 Program Enhancements". Below the header, there is a section titled "Submit your ASRS Form Electronically!" with a document icon. To the left, there is a small image of a computer monitor displaying a form. To the right, there is a paragraph of text explaining the ERS system and its benefits. At the bottom, there is a NASA logo and the text "Electronic Report Submission is available at: <http://asrs.arc.nasa.gov/>".

Submit your ASRS Form Electronically!

Electronic Report Submission (ERS) – the capability to fill out an ASRS report on a computer and send it to ASRS via a secure Internet connection – is now operational. All ASRS Reporting Forms (General Pilot, Air Traffic Control, Maintenance, and Cabin) can now be sent electronically via the ASRS website at: <http://asrs.arc.nasa.gov>.

ASRS has fully explored privacy protection and confidentiality concerns for secure Electronic Report Submission. Of the 715,000+ reports received to date, ASRS values reporter confidentiality above all other considerations. ASRS has worked with NASA's Jet Propulsion Laboratories (JPL) to apply sophisticated new technology to ERS that will ensure your identity remains protected. Currently, ASRS receives over 40,000 reports annually, of which approximately 25% are from General Aviation pilots. ASRS encourages members of the GA pilot community to take advantage of this new technology!

Electronic Report Submission is available at: <http://asrs.arc.nasa.gov/>

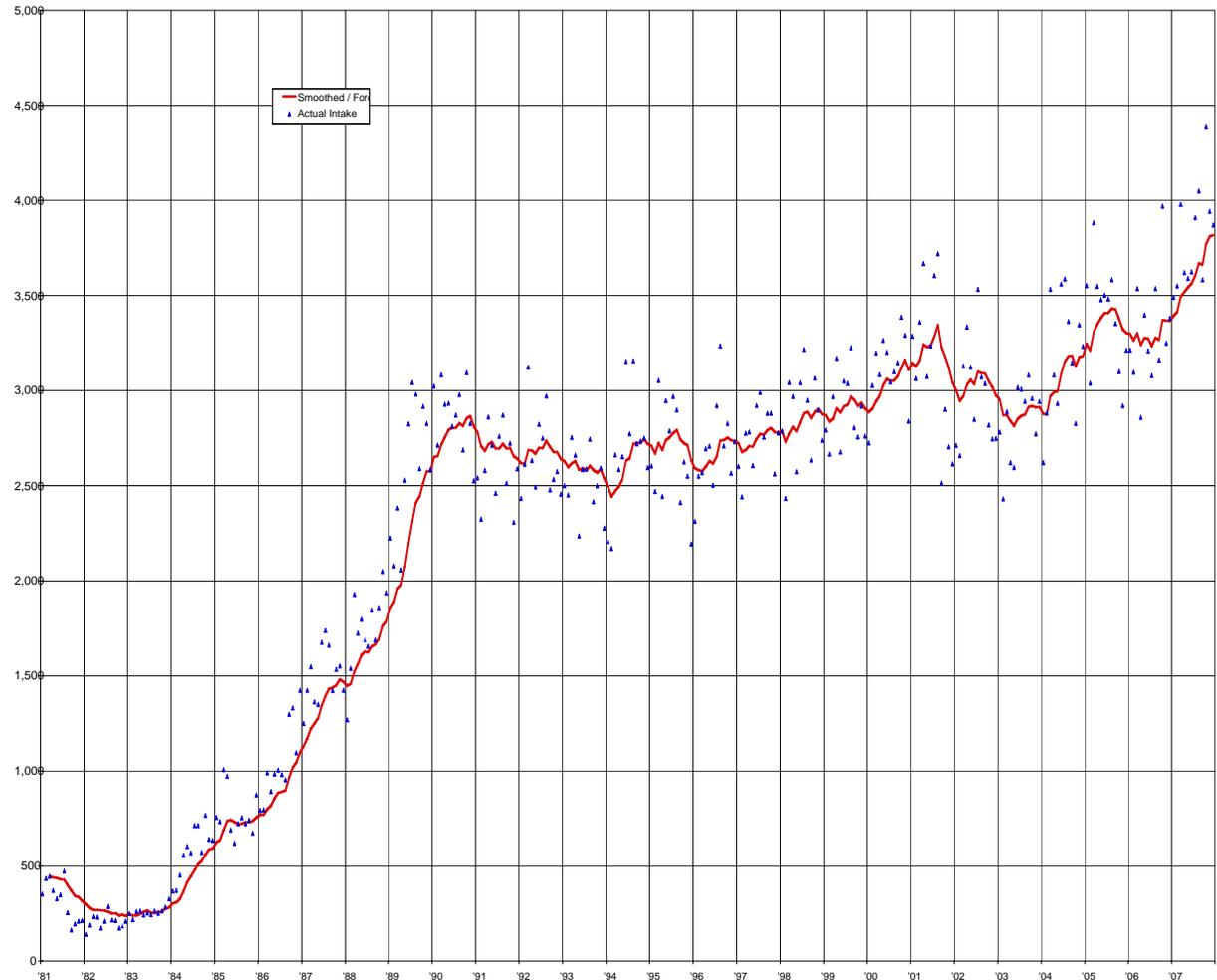
<http://asrs.arc.nasa.gov>

- ✓ **Access through ASRS Web Site**
- ▶ System initiated October 16, 2007
 - Over 13,300 online report submissions completed to date
- ▶ About 50% of direct submissions
 - Replacing paper forms
- ▶ Roughly 20% of total intake

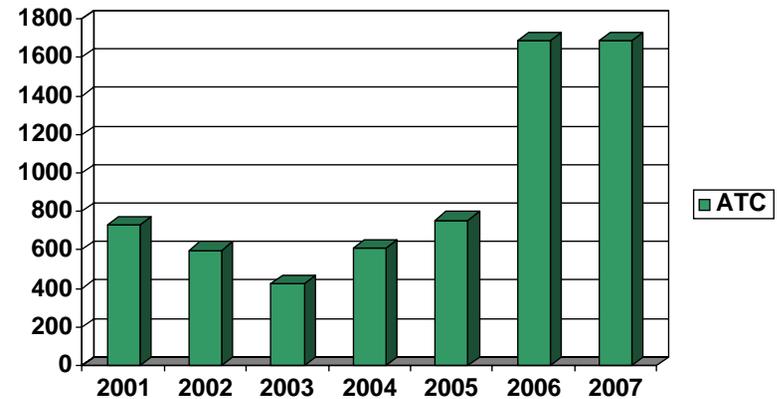
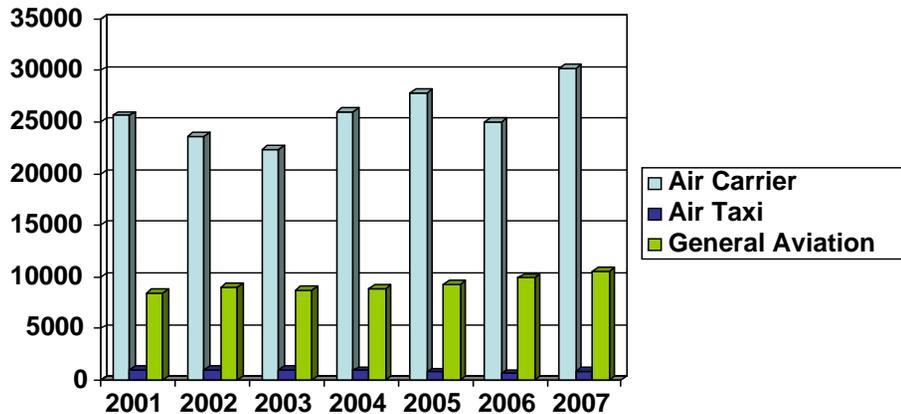
Monthly Report Intake

January 1981 – December 2007

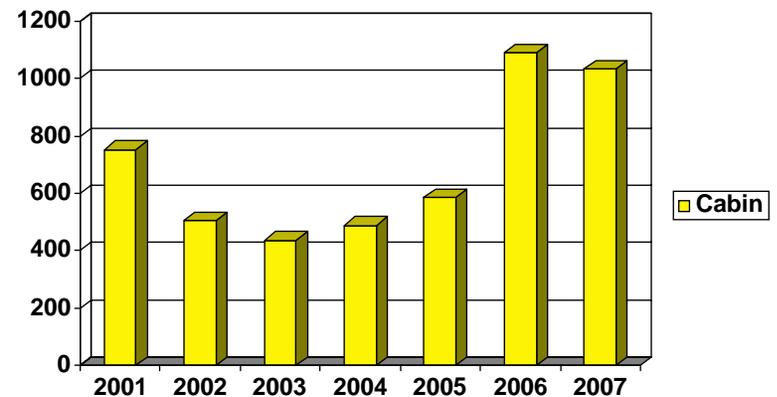
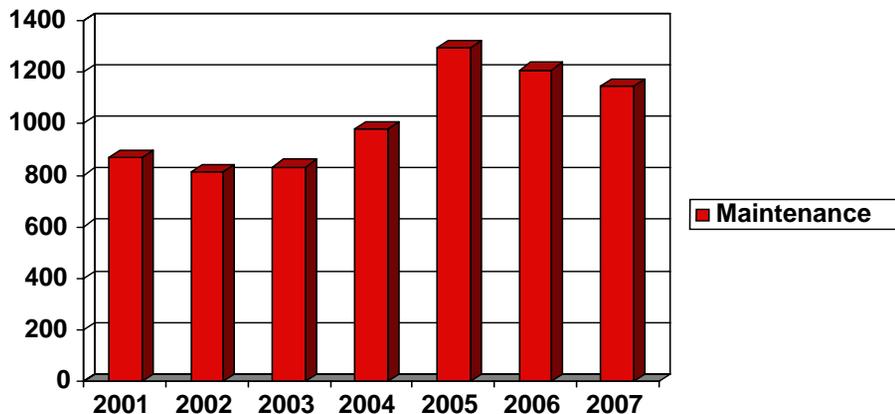
- Averaging 3,800 reports per month, 190 per working day
- Total Report intake for 2007 was **45,603** (up 5,909 from 2006)



Report Intake 2001-2007 By Reporter Groups



20% of all reports are matched to unique events



Decreases evident following September 11, 2001 are showing return to pre-9/11 levels



ASRS Report Processing



Aviation Safety Reporting System

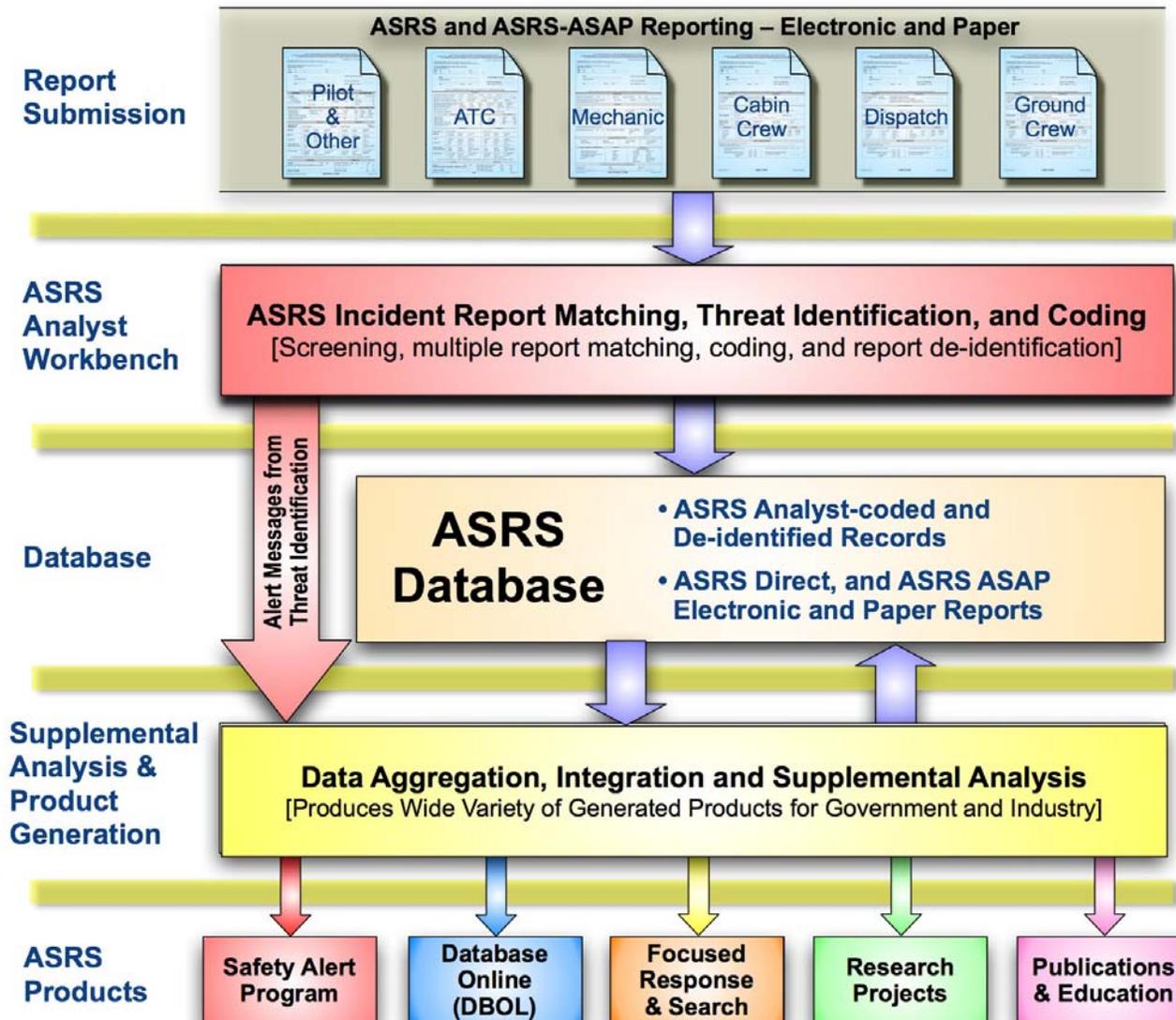


ASRS Expert Analyst Staff

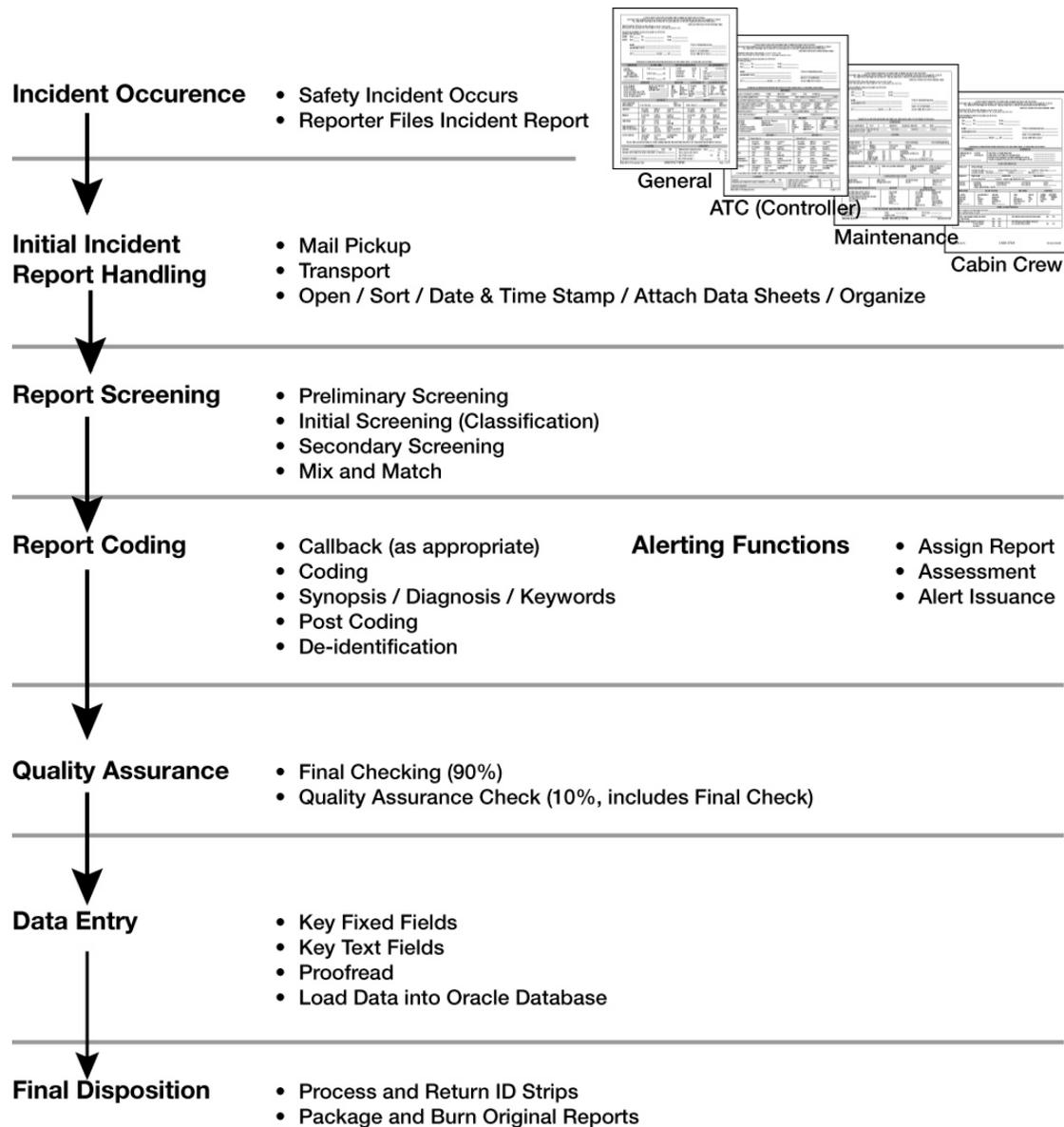
- ▶ Aviation Operational Expert Analysts perform initial screening, identification of alerts, initial analyses, database coding, and special studies (e.g., structured callback interviews and consultation on special safety topics).
- ▶ Expert Analysts are retired air carrier pilots (Part 121 and 135), retired air traffic controllers, retired maintenance technicians, general aviation pilots, and flight attendants.* A minimum of 10 years aviation experience required.
- ▶ Years of aviation experience of the current analyst staff totals to approx. 390 yrs. An average of 35.5 yrs experience in aviation.



ASRS Process Flow



Report Processing Flowchart



Incident Occurrence through Screening

Incident Occurrence

- Safety Incident Occurs
- Reporter Files Incident Report



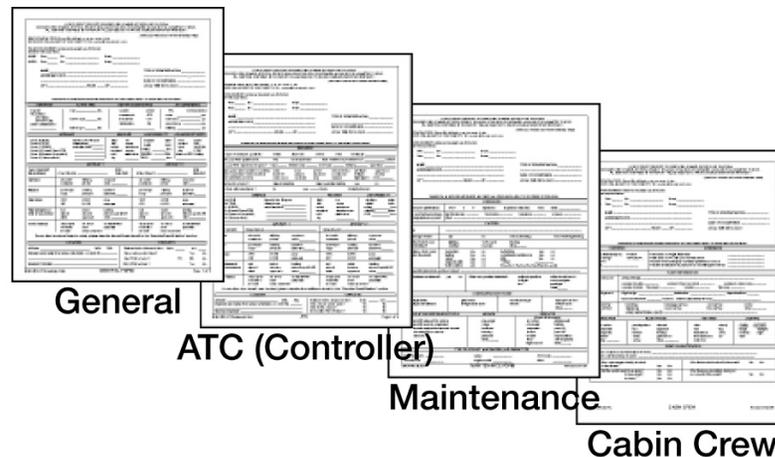
Initial Incident Report Handling

- Mail Pickup
- Transport
- Open / Sort / Date & Time Stamp / Attach Data Sheets / Organize



Report Screening

- Preliminary Screening
- Initial Screening (Classification)
- Secondary Screening
- Mix and Match



Coding & Quality Assurance

Report Coding

- Callback (as appropriate)
- Coding
- Synopsis / Diagnosis / Keywords
- Post Coding
- De-identification

Alerting Functions

- Assign Report
- Assessment
- Alert Issuance

Quality Assurance

- Final Checking (90%)
 - Quality Assurance Check (10%, includes Final Check)
-



Data Entry, Disposition

Data Entry

- Key Fixed Fields
- Key Text Fields
- Proofread
- Load Data into Oracle Database



Final Disposition

- Process and Return ID Strips
- Package and Burn Original Reports



ASRS Data Utilization



Aviation Safety Reporting System



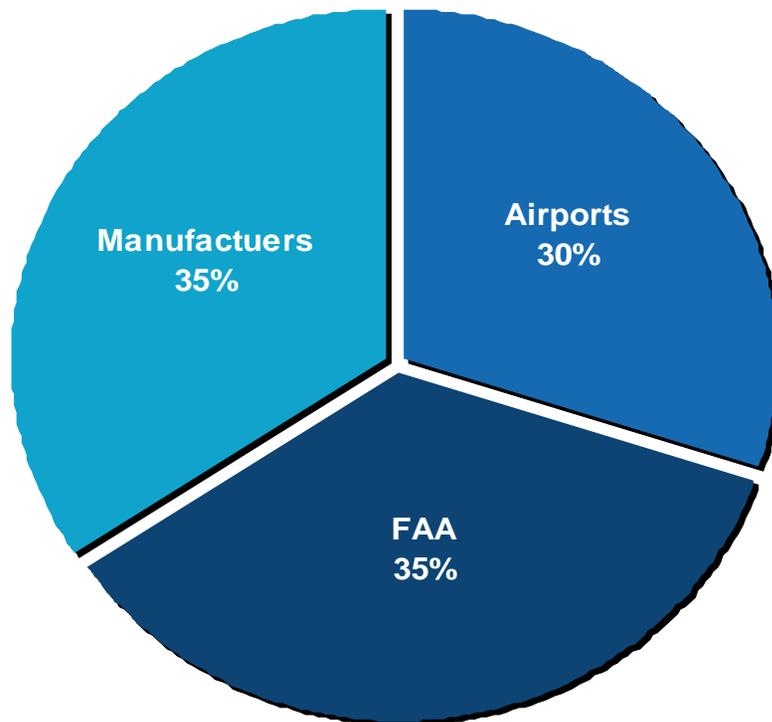
ASRS Products and Services

- ▶ Safety Alerting Messages
 - Alert Bulletins (AB)
 - For Your Information (FYI) Notices
- ▶ Safety Telecons
 - FAA, government, industry
- ▶ Search Requests
 - Direct data requests for ASRS
- ▶ ASRS Database Online (DBOL)
- ▶ Quick Response Efforts (government)
 - Congress, FAA, NTSB, etc.
- ▶ Research Projects
- ▶ Publications and Education
 - CALLBACK
 - *Directline*



ASRS Alert Messages

ASRS Alert Message Recipients - 2007



**FAA Voluntary Safety Programs Branch (AFS-230)
Receives every Safety Alert**

ALERT BULLETIN

AB 2007:33/2-1
6/18/07

729015, 707488, 685355, 680389, 679443

TO: FAA (AFS-200)

INFO: FAA (AFS-230, AFS-300, AFS-900, SEA-AEG, ANM-100), AASC, AIA, ALPA, AMFA, APA, ASAP, ATA, CAPA, IATA, IAM, ICASS, IFALPA, IPA, NATA, NTSB, PAMA, RAA, TWU

FROM: Linda J. Connell, Director
NASA Aviation Safety Reporting System

SUBJ: PARTS FALLING OFF AIRCRAFT

We recently received an ASRS report describing a safety concern which may involve your area of operational responsibility. We do not have sufficient details to assess either the factual accuracy or possible gravity of the report. It is our policy to relay the reported information to the appropriate authority for evaluation and any necessary follow-up. We feel you should be aware of the following:

ASRS has received several reports from flight crews and technicians describing the loss of aircraft parts.

(ACN 729015) CL65 First Officer reported that during taxi in ground control informed them that a large section of the left engine cowl was missing.

(ACN 707488) Two technicians reported that a B737-300 had a pylon access panel depart the aircraft during its first flight after a heavy maintenance check.

(ACN 685355) A PA32 single pilot stated that while at cruise FL550, the engine cowling departed the aircraft in two separate pieces.

(ACN 680389) A technician reported that a B737 had a right hand wing slat access panel depart the aircraft.

(ACN 679443) A technician reported that a B737-300 had the left outboard main landing tire and wheel assembly depart the aircraft.

Recently, ASRS completed an internal study "An Analysis of Aircraft Part Separation," in which expert ASRS analyst's evaluated a group of 168 reports where a part of some type was reported to have departed the aircraft. Enclosed are charts derived from the results of the study.

(Keywords: In-flight separation)

To properly assess the usefulness of our FYI service, we would appreciate it if you would take the time to give us your feedback on the value of the information that we have provided. Please contact Harvey Hartmann or Gary Brauch at (408) 541-2800 or email at hhartmann@mail.arc.nasa.gov, gbrauch@mail.arc.nasa.gov.



Aviation Safety Reporting System
385 Moffet Park Dr · Suite 200 · Sunnyvale · CA · 94089



ACN: 729015

0702

Time Of Day : 0601 To 1200

Reference Airport : ZZZ Airport

Reference : US

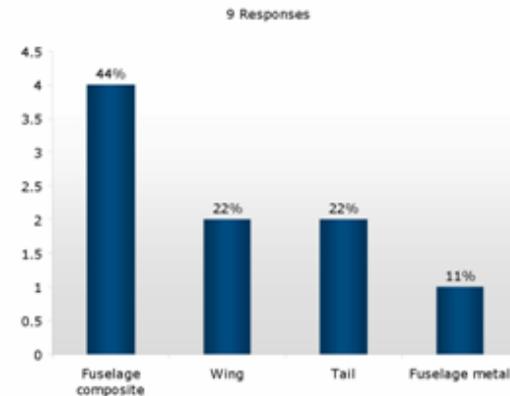
SL Single Value : 4000

Event

Conditions : VMC

Aircraft Part Separation – What Type of Airframe Parts?

1988 - December 2006



ASRS reports that have received full-form analysis and include the reporter's narrative.

Aviation Safety Reporting System

NOT RECORDED BY ASRS. REPORTER'S NAME AND ADDRESS NOT RELEASED TO THE PUBLIC.
MISSING.

11/7/2007

FOR YOUR INFORMATION

2007-234/5-73

756075

To: Airport Manager, Philadelphia International Airport (PHL), Philadelphia, PA

Info: FAA (AFS-230, AFS-200, ATM PHL ATCT, AAS-1), AASC, ALPA, IFALPA, APA, ASAP, ATA, IATA, CAPA, IPA, NTSB, RAA

From: Linda J. Connell, Director
NASA Aviation Safety Reporting System

Re: PHL TAXIWAY N CONDITION

We recently received an ASRS report describing a safety concern which may involve your area of operational responsibility. We do not have sufficient details to assess either the factual accuracy or possible gravity of the report. It is our policy to relay the reported information to the appropriate authority for evaluation and any necessary follow-up. We feel you should be aware of the enclosed deidentified report.

To properly assess the usefulness of our FYI service, we would appreciate it if you would take the time to give us your feedback on the value of the information that we have provided. Please contact Gary Brauch at (408) 541-2800 or email at gbrauch@mail.arc.nasa.gov.



Aviation Safety Reporting System
385 Moffet Park Dr · Suite 200 · Sunnyvale · CA · 94089



ACN: 756075

0710

Time Of Day : 1201 To 1800

Reference Airport : PHL Airport

Reference : PA

GL Single Value : 0

Event

Conditions : VMC

1

Reporting Facilities Tower : PHL Tower

Model : A320

1

Oversight : PIC

Flight Crew : Captain

Report : 756075

Event Detector Other Flight Crew A : 1

Emergency Action None Taken : Unable

WERE WHEEL RUTS IN THE ASPHALT ON TXWY N NORTH OF RWY 27R. THEY DID NOT EXCESSIVELY DEEP FROM THE COCKPIT. WE WERE CLERED TO HOLD SHORT OF RWY N. MAIN WHEELS SETTLED INTO RUTS AND COULD NOT MOVE ACFT USING SAFE OF THRUST. CALLED COMPANY. MECHANIC CAME OUT AND TOWED US OUT OF RUT. REQUIRED 2 ATTEMPTS, AS THE FIRST TUG WAS TOO SMALL, AND THE TOW BAR SHEAR KE. MECH DETERMINED THAT NO DAMAGE TO ACFT OCCURRED AND WE DEPARTED FULLY. WE HAD BEEN TOLD THAT THIS HAPPENED TO ANOTHER COMPANY ACFT THE IS DAY AT THE SAME LOCATION, BUT WE COULD NOT SEE ANY HOLES THAT LOOKED OUGH TO BE A THREAT. THERE WAS NOTHING NOTED ON THE RELEASE OR IN THE OR ON ATIS ABOUT THIS. HOWEVER, GND CTL SEEMED AWARE THAT THE RUTS ED A LOT OF THRUST TO NEGOTIATE. I THINK THE EVENT OCCURRED BECAUSE THE THORITY SHOULD HAVE CLOSED THE TXWY AND REPAIRED THE RUTS, ESPECIALLY HE PREVIOUS ACFT GOT STUCK. 1) ARPT SHOULD KEEP SURFACES IN GOOD REPAIR. SENCE OF (1), CLOSE TXWY. 3) IN ABSENCE OF (1) AND/OR (2), DISSEMINATE RIATE NOTAMS. 4) WHEN A COMPANY ACFT HAD THIS OCCUR THE PREVIOUS DAY, WE HAVE HAD SOME RELIABLE INFO ABOUT THE HAZARD FROM THE COMPANY.

GOT STUCK IN A PAVEMENT RUT ON PHL TXWY N AT THE RWY 27R HOLD SHORT LINE. DISTANCE REQUIRED.

Alert Examples (Pilot Reported)

- ▶ Airbus A320 Brake Steering Control Unit Failure
- ▶ B737-800 Flight Crew Oxygen
- ▶ MD-80 Un-commanded Roll Following FMA Failure
- ▶ B767-300 Passenger Seat Control
- ▶ Passenger Electronic Device (PED) Interference

2007



Alert Examples (Controller Reported)

- ▶ Pittsburgh 8 Departure Issue
- ▶ Aircraft Data Block Anomaly
- ▶ Flight Service Operations
- ▶ ZMA Radar Equipment Anomalies
- ▶ Ocean 21 Operational Issue

2007

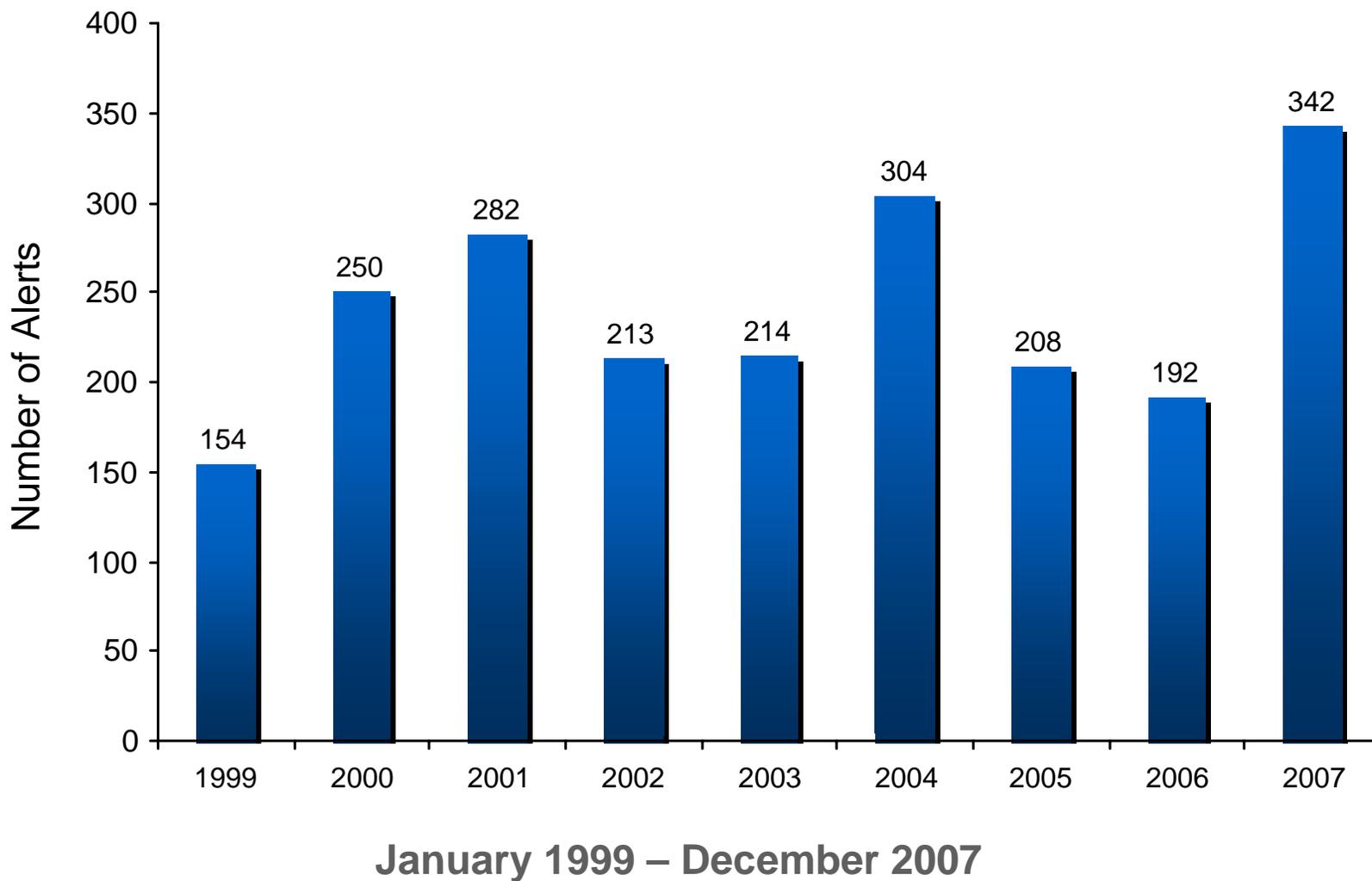


Maintenance Related Alert Examples

- ▶ CRJ200 Cargo Fire Bottle Thermal Discharge Anomaly
- ▶ B737-800 FMS Anomaly
- ▶ SAAB 340B Engine Intake Heater Mat
- ▶ EMB 145 Elevator Trim
- ▶ CL65 Trust Reverser Unlock Warning



ASRS Alerting Messages



Alerting Responses

January 1999 – December 2007

	Response	Total
→	Action taken as a result of the AB/FYI	250
	Addressee disputes factual accuracy of AB/FYI	140
→	Action initiated in response to AB/FYI but not completed	101
	Action initiated before AB/FYI was received	89
→	Issue raised by AB/FYI under investigation	60
	Information in AB/FYI insufficient for action	51
	Addressee in factual agreement but sees no problem	51
	For information only, no response expected	42
	Action not within addressee's jurisdiction	30
→	Addressee agrees with AB/FYI but is unable to resolve	28

ASRS/FAA and Industry Telecons

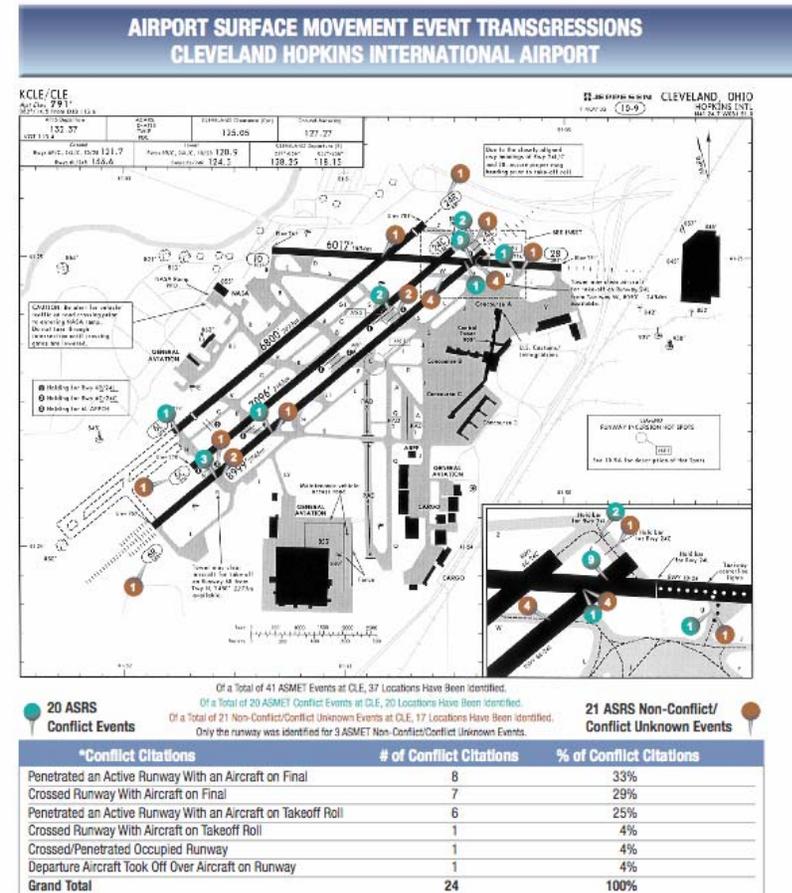
- ▶ “Webcon” provides graphical supplement to telephone conference.
- ▶ ASRS/FAA Safety Telecons occur monthly.
- ▶ Supplemental telecons with government and industry occur on “as needed” basis.



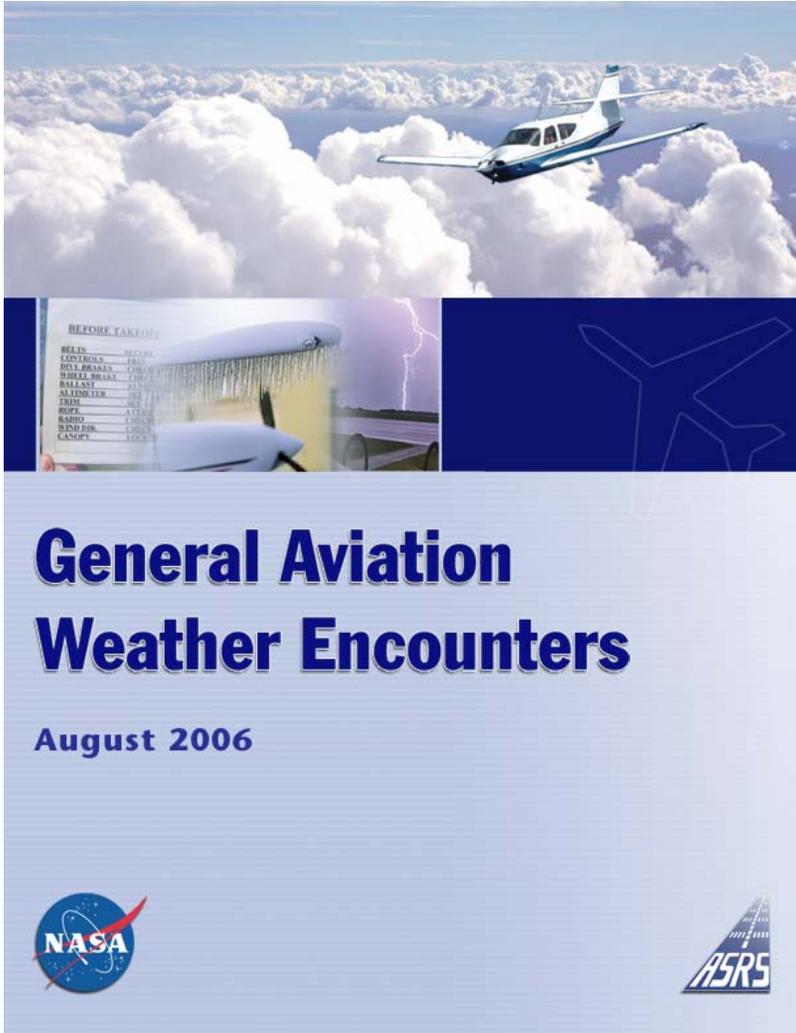
Quick Response

Airport Surface Movement Transgressions

- ▶ Request of FAA Office of Runway Safety (ATO-S)
- ▶ Oct. 1, 1999 – Sep. 30, 2003
- ▶ 75 U.S. Air Carrier Airports
- ▶ Analysts coded 1,184 ASME incidents
 - 42% of ASRS ASME incidents in database (2,772)



Focused Research



General Aviation Weather Encounters

- ▶ Request by FAA's Flight Standards Office (AFS-230)
- ▶ July – December 2005
- ▶ Prompted by the high accident rate resulting from adverse weather encounters experienced by GA pilots
- ▶ Structured Callback
 - Mailed questionnaire
- ▶ 100 completed supplemental questionnaires



August 2008



Publications

▶ CALLBACK

- Short format
- All segments of the aviation community
- 334 Issues
- Many awards

▶ Directline

- Longer format
- Intended for operators of transport category aircraft
- 10 issues
- FSF Award



Number 333

September 2007

ASRS

Ramp Safety Incidents

Over the past year, ASRS has received many reports of damage to aircraft and occasional injury to ramp personnel during airport ramp operations.

Whether a ramp incident occurs during taxi-in to the gate (this month's front page), or during pushback (see our back page), ASRS reporting reveals that several human factors repeatedly recur - failure to follow procedures, communications breakdowns, and lack of training. It is evident that safe ramp operations are a shared responsibility among flight crews, ramp personnel, and airlines.

This month's selection of incident excerpts provides a review of some of the factors that can contribute to ramp incidents - and to the "saves" as well.

"Stop the Show"

A B747-400 flight crew found it necessary to instruct ground supervisors about proper aircraft arrival procedures.

■ ...Passengers were still deplaning [while] we were preparing to secure the aircraft...and I released the brakes and sensed the aircraft moving. I stopped the aircraft with light brakes and stopped the deplaning. Maintenance technicians checked the aircraft and we repositioned with a tug 2-3 feet back to the '400' spot. Jetbridge was realigned and deplaning continued. No injuries or damage. I held a full debrief with contract and company ramp managers on

waiting to park the aircraft, stop the plane at the top of the lead-in line and proceed no further. This is important for a couple of reasons: to make sure the parking area is clear of obstacles, to ensure that we use the proper lead-in line, and the proper spot to stop the aircraft to bring up the loading bridge and service the aircraft...I did not wait for the guide man, proceeded to park, and stopped the aircraft only when I realized what we had done and were in imminent danger of hitting the jetbridge with the #1 engine.

In another incident, an alert ramp agent saved a B737 flight crew from a malfunctioning automated parking system.

■ ...Taxied in to gate. Automated parking system showed 737 and to proceed. Parking system showed us on the taxi line and prompted us to continue. Parking system never showed us approaching the stop position or commanded us to stop. It just commanded that we continue. The ramp agent then banged on the side of the airplane and I stopped. I estimate that we had gone at least 10 feet beyond where we were supposed to stop and stopped within 4 or 5 feet of the jetway. If the ramp agent had not hit the side of the airplane, I very well may have made contact with the jetways...The agent on the ground this time did an outstanding job, and all agents need to be aware that this could happen.

NMAC (Near Miss Abeam Catering)

■ During taxi-in to gate, our ground crew began to give me hand signals with lighted wands to proceed in on the lead-in line. This requires a 90-degree turn to the right. During the turn, I stopped the aircraft, as there were two catering trucks off to the left side and I was not sure that I would clear them with the left wing. I flashed all of my landing and taxi lights at the guide man, who apparently did not think there was any problem [and] continued to give me the come forward signal. I refused to move and flashed the lights at him again. A second guide man came out and told the drivers of the catering trucks to move out of the way.



August 2008



33

ASRS Database Online (DBOL)

Aviation Safety Reporting System
2006 Program Enhancements

The ASRS Database is Now Searchable Online!

We are pleased to announce that the ASRS database search capability is now available on the ASRS website. Researchers, pilots, controllers, dispatchers, cabin crew, mechanics, government agencies, and others who want to access data from the world's leading repository of aviation safety information now have an invaluable resource.

The ASRS database search is accessible through the ASRS web site at <http://asrs.arc.nasa.gov>. Users logging on to the ASRS web site should click on the ASRS Database Online link. Users can download the de-identified incident reports in a MS word format.

The "engine" for the ASRS Online Database is a browser-based, cross-platform "Web Query" enhancement developed by ASRS. Users retrieve reports by searching on specified fields including incident date (month/year), environmental conditions, aircraft operator and type, incident location, reporter affiliation, event assessments, and text fields. ASRS's database includes the de-identified narratives submitted by reporters.

The ASRS Online Database makes it easier than ever for users to independently explore ASRS data for themes, patterns, and issues of interest. We would appreciate any feedback about this new tool. Planned future enhancements include the ability to download the data in other useful formats.

Database Online is available at: <http://asrs.arc.nasa.gov/search.htm>

<http://asrs.arc.nasa.gov>

- ▶ **Access through ASRS Web Site**
- ▶ System initiated August 23, 2006
 - Over 29,500 total online queries completed
 - Over 17,00 queries completed in 2007
- ▶ Fixed field and text search capability
- ▶ Data formats (export)
 - **MS Word, Excel, CSV HTML**
- ▶ Narrative & Synopsis



ASRS Web Site

ASRS Aviation Safety Reporting System

Home Immunity Policy Contact

Program Overview Report to ASRS Search ASRS Database Safety Publications International Online Resources

Confidential. Voluntary. Non-Punitive.

ASRS captures confidential reports, analyzes the resulting aviation safety data, and disseminates vital information to the aviation community.

REPLAY

NEWS & EVENTS

- ▶ January 31, 2008
[CALLBACK Issue #337 added.](#)
- ▶ January 22, 2008
[CALLBACK Issue #336 added.](#)

REPORT TO ASRS

Try our new Electronic Report Submission below.

- ▶ [Electronic Report Submission](#) ^{NEW}
- ▶ [Paper/US Mail Submission](#)

CALLBACK VIEW ALL

CALLBACK is our Monthly Safety Publication. Read and subscribe below.

- ▶ Issue #337 [HTML](#) [PDF](#)
- ▶ Issue #336 [HTML](#) [PDF](#)

▶ [Join CALLBACK E-Notification list](#)

ASRS Website Administrator: Mariana Carmona || NASA/ASRS Director: Linda Connell
NASA Privacy Statement || NASA Home || NASA Ames

<http://asrs.arc.nasa.gov>

- ▶ Updated Fall 2007
 - Over 7 million hits in 2007

- ▶ File an ASRS Report
 - Electronic
 - Print and Mail
- ▶ Database Online
- ▶ ASRS Publications
- ▶ Program Information
- ▶ Immunity Policies



ASRS Model Applied to Aviation & Other Domains

National and International Reputation

ASRS Recognized Model for Proactive Contribution to Safety & Risk Management Process

Int'l Confidential Aviation Safety Systems (ICASS)

- Includes 12 countries modeled after ASRS

Firefighters Near Miss Reporting System

- Launched August, 2005 was modeled after ASRS
- Development Task Force includes FAA and NASA ASRS

Confidential Close Call Reporting System (C3RS)

- Railroad Safety Reporting System was modeled after ASRS
- Under development through collaboration with Federal Rail Administration, Volpe National Transportation System Center, and Railroad Industry

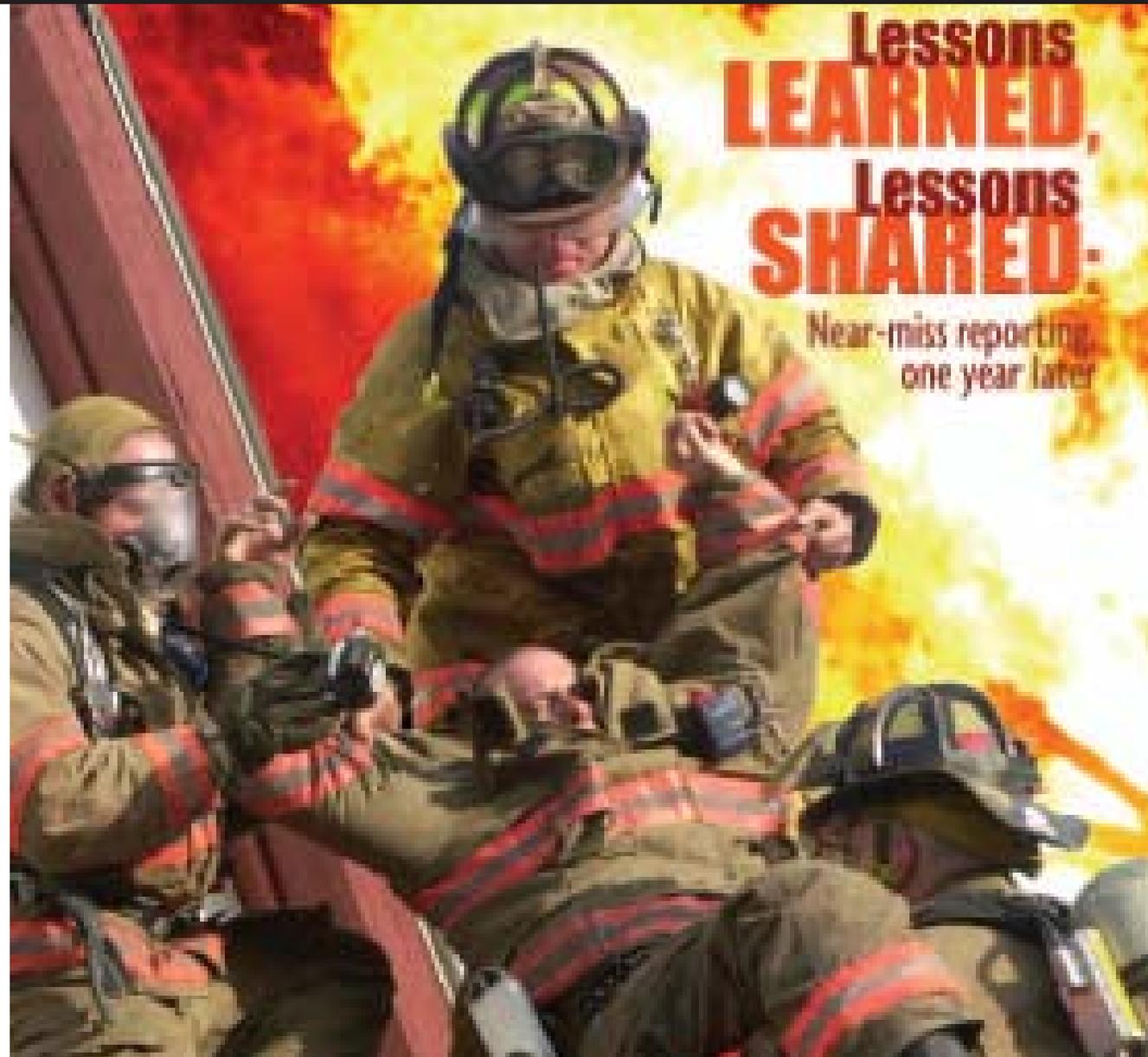
Patient Safety Reporting System (PSRS)

- Collaboration between NASA ASRS and Dept of VA, National Center for Patient Safety



INTERNATIONAL CONFIDENTIAL AVIATION SAFETY SYSTEMS (ICASS)

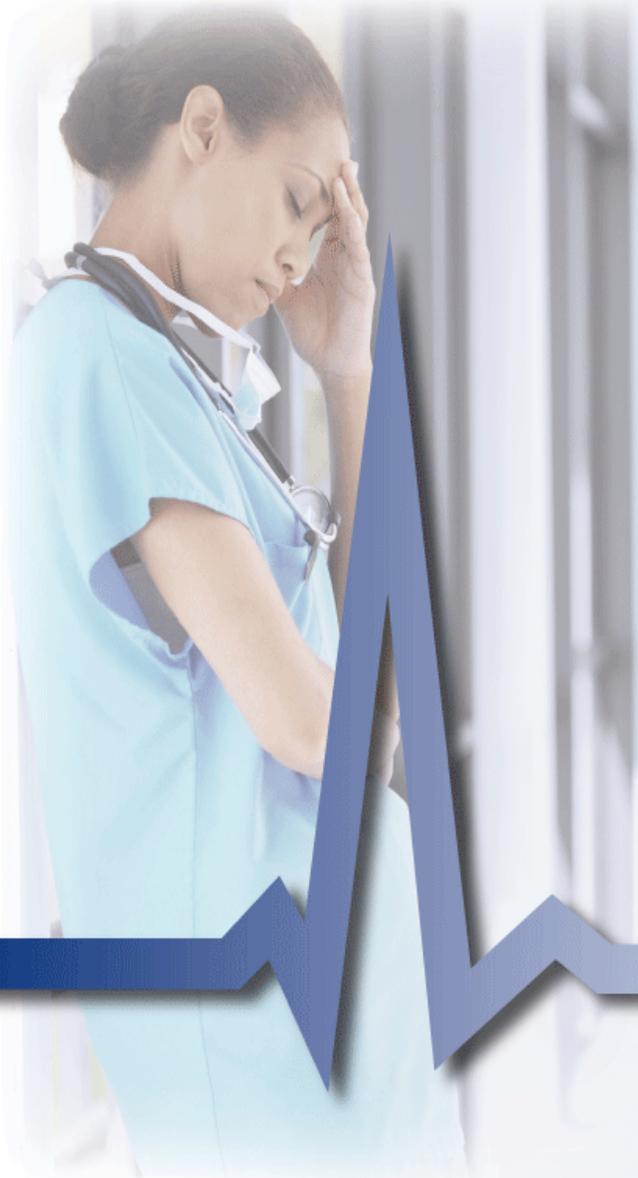






Confidential Reporting in the U.S Railroad Industry

Your Voice Counts!



**Patient Safety
Reporting System**

**See It. Report It.
Make a Difference.**

VOLUNTARY • CONFIDENTIAL • NON-PUNITIVE



PSRS is a cooperative program between VA and NASA.



Unique Aspects of ASRS Confidential Reporting Model

System-Wide Perspective - capability to identify hazards identified by aviation personnel and match reports from all segments of aviation community

- ASRS was catalyst for recent FAA focus on Teterboro Departures

System-Wide Alerting - both national and international capability to provide ASRS Alert Messages to industry and government

Data Processing through Aviation Expert Analysts

- ASRS Office staff include Aviation Expert Analysts with a combined total of 380 years of experience in aviation (air carrier pilots, corporate pilots, general aviation pilots, air traffic control, and maintenance)
- Experts read and review 100% of reports and reliably code information to databases

Comprehensive and Time Tested Coding Taxonomy

- Fixed Field Codes combined with Narrative Text yields qualitative data for further secondary analysis techniques (Perilog, special studies, focused analytic techniques, etc)



Unique Aspects of ASRS Confidential Reporting Model

Strong Immunity and Legal Provisions

- Federal Law specifically addressing ASRS (14 CFR 91.25)
- FAA Advisory Circular 00-46D
- ASRS Mandated by Congress in 1980's

Information Sharing

- Database Search Requests, Database Access Online, Topical Studies, Structured Telephone Callback Studies, Collaborations with Industry and Gov't (FAA, NTSB, NASA, TSA, etc.)
- Largest source of airline ASAP data collected in central location

National and International Reputation

- ASRS Recognized Model for Proactive Contribution to Safety Process
- ASRS Model Being Utilized by Other Domains for Safety Improvements



SUMMARY

WHY CONFIDENTIAL REPORTING WORKS

- When organizations want to learn more about the occurrence of events, the best approach is simply to ask those involved.
- People are generally willing to share their knowledge if they are assured:
 - Their identities will remain protected
 - There is no disciplinary or legal consequences
- A properly constructed ***confidential, voluntary, non-punitive*** reporting system can be used by any person to safely share information



SUMMARY

Confidential reporting systems
have the means to answer the
question *why*



Close to Home

by John McPherson

6-23

closetohome@compuserve.com

McPherson



"I'm serious! Watch! I hit the left arrow, the plane banks left, hit the right arrow and ..."

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